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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,986	12/26/2001	Ikuto Ooyama	02410266AA	7794

7590

07/03/2003

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EXAMINER

VALENCIA, DANIEL E

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,986

Applicant(s)

OOYAMA ET AL.

Examiner

Daniel E Valencia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on MAY 12, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicant's communication filed on May 12, 2003 has been carefully studied by the Examiner. Some of the arguments advanced therein in combination with the amendment, are persuasive and certain prior art rejections have been withdrawn. However, in view of further consideration, a new rejection has been applied. This action is **not** made final.

Information Disclosure Statement

The information disclosure statement filed September 24, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Taiwanese application No. 336285 has been considered; however, the Office Action of July 29, 2002 has not been considered because it is not present in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokota Japanese Patent No. JP 62235909 (submitted by Applicant). Refer to the appropriate drawings or parts of the specification. Regarding claim 5, Yokota discloses an optical fiber collimator (drawing 3a) comprising: a lens (3) having an optical axis; an optical fiber (1) having an optical axis and an inclined end surface (theta); and a holding member (6) which holds the lens and the optical fiber so that the optical axis of the optical fiber is located at an eccentric position with respect to the optical axis of the lens. Yokota further discloses that the holding member includes a cylindrical optical fiber chip (2) having a center (1) and holding the fiber (1) on the center thereof, and a cylindrical member (6) holding the lens and the optical fiber chip so that the optical axis of the lens is located at an eccentric position with respect to the center of the optical fiber chip (see abstract), as explained in claim 10.

Claims 1, 5, and 6, rejected under 35 U.S.C. 102(b) as being anticipated by Frenkel Patent No. DE 39 10 166 (submitted by Applicant). Refer to the appropriate drawings or parts of the English abstract. Regarding claims 1, 5, and 6, Frenkel discloses an optical fiber collimator (figure 1) comprising: a lens (2); and an optical fiber chip (7) arranged at a distance from said lens, said optical fiber chip holding an end portion of an optical fiber (9) and having an end surface treated to be inclined, wherein an optical axis of said optical fiber is eccentric with respect to a center of said lens to thereby set a quantity of eccentricity of said optical fiber so that the center of said lens substantially coincides with a center of a light beam incident on said lens from said

optical fiber, and wherein an optical path of the optical fiber is eccentric with respect to a center axis of the optical fiber chip.

Claims 1, 2, and 5-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi U.S. Patent No. 5,682,452. Refer to the appropriate drawings or parts of the specification. Takahashi discloses an optical fiber ferrule and optical coupler with all the limitations of the abovementioned claims. Regarding claims 1, 5, 6, and 10, Takahashi discloses an optical fiber collimator (Fig. 6 and 7) comprising: a lens (26); and an optical fiber chip (16) arranged at a distance from said lens, said optical fiber chip holding an end portion of an optical fiber and having an end surface treated to be inclined, wherein an optical axis of said optical fiber is eccentric with respect to a center of said lens (fig. 7A) to thereby set a quantity of eccentricity of said optical fiber so that the center of said lens substantially coincides with a center of a light beam incident on said lens from said optical fiber, and wherein an optical path of the optical fiber is eccentric with respect to a center axis of the optical fiber chip. Takahashi's disclosure further shows that the cylindrical member (30, 30', 31) holding the lens and the optical fiber chip are arranged so that the lens and the optical fiber chip are concentric, as mentioned in claim 7. With reference to claims 2, 8, 9, 11, and 12, Takahashi discloses that the lens is a distributed refractive rod lens (col. 1, line 56) with an inclined end surface confronted with the inclined end surface of the optical fiber. Although Takahashi does not explicitly state that it is a GRIN or graded index refractive lens, distributed refractive index lens would inherently include a GRIN lens. Takahashi's

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disclosure shows that the optical fiber chip and the lens have equal outer diameter and wherein, the lens and the optical fiber are secured to each other with a cylindrical member having a constant inner diameter (30, 31), as described in claims 13 and 15. With regards to claim 14, Takahashi discloses an embodiment in which the optical fiber chip and the rod lens have a different diameter (fig. 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi. Takahashi as applied above discloses an optical fiber ferrule and collimator with a majority of the limitations of the claimed invention; however, the reference does not explicitly disclose a cylindrical holding member, which has a lens holding hole and an optical fiber chip holding hole formed to that the axes of said holding holes are shifted from each other.

On the other hand, Takahashi does disclose an embodiment (figure 10) in which the optical fiber chip is made eccentric with respect to the center of the lens. Although the reference does not show a holding member in this embodiment such as the holding members in the other embodiments (fig. 6) described above, one of ordinary skill in the art would recognize (1) that the lens and the fiber chip require a holding member in

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order to keep the device together, and (2) that the holding member would need to be shaped according to the offset positioning of the lens and the fiber holding chip.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a holding member having the particular shape of the device in Figure 10 of Takahashi.

Conclusion

Applicant's arguments with respect to claims 1, 2, and 4-15 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E Valencia whose telephone number is (703)-305-4399. The examiner can normally be reached on Monday-Friday 9:30-6:00.

The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-7724 for regular communications and (703)-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

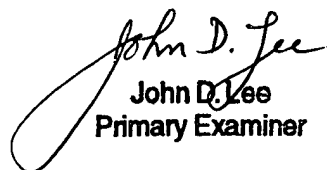
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June 25, 2003


John D. Lee
Primary Examiner